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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/717,250	11/19/2003	Martin Evans	CAT/008	7738

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EXAMINER

NECKEL, ALEXA DOROSHENK

ART UNIT	PAPER NUMBER
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1764

DATE MAILED: 05/01/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/717,250

Applicant(s)

EVANS, MARTIN

Examiner

Alexa D. Neckel

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-26 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-26 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 19 November 2003 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. ____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- ☒ Notice of References Cited (PTO-892)
- ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 4/2/04 & 7/22/04.
- ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____.
- ☐ Notice of Informal Patent Application (PTO-152)
- ☐ Other: ____.

DETAILED ACTION

Drawings

1. The drawings are objected to as failing to comply with 37 CFR 1.84(p)(5) because they do not include the following reference sign(s) mentioned in the description:

In paragraph [0030], "delivery line 108" is not in figure 1;

in paragraphs [0017], [0018], [0041], and [0042], "system 100" is not in any of the figures; and

in paragraphs [0044] and [0045], there is no "502" in figure 5.

Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

2. The drawings are objected to as failing to comply with 37 CFR 1.84(p)(5) because they include the following reference character(s) not mentioned in the description:

In figure 5, reference numbers 520 and 506".

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Corrected drawing sheets in compliance with 37 CFR 1.121(d), or amendment to the specification to add the reference character(s) in the description in compliance with 37 CFR 1.121(b) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Specification

3. The disclosure is objected to because of the following informalities:

In paragraph [0048] it appears that "flange 502" is a typographical error in some manner. Flanges have been previously recited at 506 and 502 was previously recited at separator. Additionally, 502 is not in figure 7.

In paragraph [0019], Serial No. 10/445,453 should be updated as it is now abandoned, but does have a pre-grant publication number, 2004/0099572.

In paragraph [0038], Serial No. 10/304,670 should be updated with either is publication number (if one has been established) or with the pre-grant publication number, 2004/0102929.

Appropriate correction is required.

Claims Analysis

4. It is noted that claims 1-20 recite a "system" which is not a statutory category of invention. It has been determined that the claims are directed to an apparatus and the appropriate principles for interpreting claims for that particular category of invention have been applied.

Claim Rejections - 35 USC § 103

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. Claims 1-3, 6-11, and 14-26 are rejected under 35 U.S.C. 103(a) as being unpatentable over Evans (2004/0166032) in view of Comardo (2001/0041117).

With respect to claims 1-3, 10, 11, 18, 21, and 23, Evans discloses a multi-catalyst injection system (502) comprising:

a plurality of vessels suitable for storing catalyst (440 and 510);
a plenum/manifold (530) fluidly coupling the vessels (440 and 510); and
a plurality of dispense mechanisms (432 and 520) for dispensing catalyst from each vessel (44 and 510) to an FCC unit (424).

Evans fails to disclose wherein the plurality of vessels can be integrated into a single compartmentalized (by a separator) vessel.

Comardo discloses a catalyst charging system/hopper (35) which is shown to have a plurality of internal planar partitions (358) so that there are the same number of compartments as discharge means (paragraph [0070] and figure 18). It would have been obvious to one of ordinary skill in the art at the time of the invention to use a single compartmentalized storage vessel, such as that of Comardo, in place of multiple single vessels of Evans in order to have more a compact design as well as since it has been held that the use of one piece construction instead of a multiple component construction would be merely a matter of obvious engineering choice. *In re Larson*, 340 F.2d 965, 968, 144 USPQ 347, 349 (CCPA 1965).

With respect to claims 6 and 14, though Evans does not contemplate the vessels being of different sizes, it has been held that, where the only difference between the prior art and the claims was a recitation of relative dimensions of the claimed device and a device having the claimed relative dimensions would not perform differently than the prior art device, the claimed device was not patentably distinct from the prior art device. *In Gardner v. TEC Systems, Inc.*, 725 F.2d 1338, 220 USPQ 777 (Fed. Cir. 1984), cert. denied, 469 U.S. 830, 225 USPQ 232 (1984).

With respect to claims 7 and 15, the vessels of Evans reasonably appear to be of substantially equal volume (figure 5).

With respect to claims 8, 20, and 22, it would have been obvious to make the catalyst compartments of the modified device of Evans adjustable in order accommodate for varying proportions of different catalysts required for an FCC reactor.

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It has been held that adjustability, where needed, is not a patentable advance. *In re Stevens*, 212 F.2d 197, 101 USPQ 284 (CCPA 1954).

With respect to claim 16, Evans further discloses catalyst fill ports (442) at the top of the vessel and wherein the plenum (530) is within the vessel in fluid communication with the fill ports (442) (see figure 5).

With respect to claim 17, Evans further discloses wherein the vessel is controlled to a pressure of at least about 10 psi to about 100 psi (see claims 14 and 15).

With respect to claim 19, the combination of Evans with Comardo would result in the separator having a hole in order to provide for fluid communication between the compartments.

With respect to claims 24 and 25, Evans further discloses wherein the dispensing can occur simultaneously or sequentially (paragraph [0037]).

With respect to claim 26, Evans further discloses wherein the first and second vessels have different catalysts (and therefor are chemically different) (paragraph [0037]).

7. Claims 4, 5, 12, and 13 are rejected under 35 U.S.C. 103(a) as being unpatentable over Evans (2004/0166032) in view of Comardo (2001/0041117) as applied to claims 1, 8, 10 and 20 above, and further in view of Marks (4,782,427) or Komeya et al. (4,660,881).

With respect to claims 4, 5, 12, and 13, in making the compartments adjustable, as discussed with claims 8 and 20 above, it would have been obvious to provide known means by which to adjust the partitions to accommodate varying sizes, such as flanges

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rotatable around a joint. Such partition adjusting means are known as evidenced by Marks (col. 3, lines 56-67) and Komeya et al. (col. 9, lines 12-23).

Conclusion


8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Alexa D. Neckel whose telephone number is 571-272-1446. The examiner can normally be reached on Monday - Thursday from 9:00 AM - 7:30 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Glenn Caldarola can be reached on 571-272-1444. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Alexa D. Neckel
Primary Examiner
Art Unit 1764

April 27, 2006


ALEXA DOROSHENK NECKEL
PRIMARY EXAMINER